REMARKS

In response to the Office Action mailed November 1, 2002, Applicants respectfully request reconsideration.

Claims 12-23 have been examined. By this amendment, Applicants are canceling claims 1-11 and 24-85, without prejudice or disclaimer, and amending claims 12, 18 and 22. New claims 86-148 have been added. As a result claims, 12-23 and 86-125 are pending with claims 12, 90, 108 and 125 being independent claims. No new matter has been added.

Information Disclosure Statement

The Office Action indicates that the IDS submitted January 16, 2001 and the IDS submitted August 30, 2000 did not include copies of the references submitted. Although Applicants received a return receipt postcard indicating that the references were received, to further prosecution of this case, Applicants intend to resubmit, via hand delivery, the copies together with a copy of the related 1449 form for the Examiner's use. No additional fee will be provided, as it is respectfully submitted that the IDS's were timely filed.

Non-Elected Claims

In response to the Restriction Requirement issued on June 13, 2002, Applicants previously elected claims 12-23 for prosecution. Claims 1-11 and 24-85 were not elected. These non-elected claims 1-11 and 24-85 are hereby cancelled without prejudice or disclaimer. Applicants reserve the right to prosecute these claims in a continuing application.

Rejections Under 35 U.S.C. §103

Claims 12-23 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,719,948 (Liang). Without acceding to the propriety of this rejection, the Applicants have amended claims 12-23.

The authentication system described in Liang detects graphic images, indicia and/or characters that are either visible or fluorescent and made visible when exposed to UV light (see col. 4, lines 10-29). A human or recognition logic 70 used in the system authenticates the image that is detected by the system by comparing the image to a predetermined image (see col. 7, lines 15-45). The system returns an authentication signal to the user, thereby indicating whether the image is authentic. Further, although Liang detects light emission from the image, it is the shape of the image that is used to authenticate the item. Also, the image in Liang can be authenticated by a human without the use of a display as the image may be visible to a human (see Abstract).

Claim 12

Claim 12, as amended, is directed to an authentication device for authenticating a mark that is of <u>any</u> desired pattern. The device includes, *inter alia*, a snapshot mode detector that detects light emission or absorption of the light-sensitive compound in the mark after the mark has been irradiated, the snapshot mode detector provides data representative of the detected emission or absorption of the light-sensitive compound in the mark, a processor processes the data *independent of the pattern of the mark* and compares the data that is independent of the pattern of the mark to a standard to render an authentication signal based on the comparison. In summary, the device of claim 12 may authenticate a mark *regardless of its shape*, whereas Liang discloses an authentication system that authenticates a sample *based on the shape* of an image (i.e., optical character recognition). Support for this amendment may be found on page 10, lines 16-20. Therefore, amended claim 12 is believed to patentably distinguish Liang and the rejection should be withdrawn. Claim 13-23 and 86-89 depend directly or indirectly from claim 12 and are patentable for at least the same reason.

New Claim 90

Claim 90 has been added and is directed to an authentication device that detects a first intensity at a first wavelength and a second intensity at a second wavelength and calculates a ratio of the first intensity to the second intensity or a ratio of the first wavelength to the second wavelength. This ratio is then compared to a standard to

render an authentication signal. Support for this claim is found, for example, from page 20, line 16 to page 24, line 14. As discussed above, Liang does not disclose calculating a ratio of wavelengths or intensities for comparisons to a standard. Accordingly, new claim 90 patentably distinguishes Liang. Claims 91-107 depend directly or indirectly from claim 90 and are patentable for at least the same reason.

New Claim 108

Claim 108 has been added and is directed to a system comprising, *inter alia*, a detection device comprising a snapshot display; and an invisible mark that is viewable only through the snapshot display. Support for this claim is found, for example, on page 10, lines 27-29. As discussed above, Liang does not disclose an image that is only visible on the display; therefore, new claim 108 patentably distinguishes Liang. Claims 109-124 depend directly or indirectly from claim 108 and are patentable for at least the same reason.

New Claim 125

Claim 125 has been added and is directed to a device comprising, *inter alia*, a detector adapted to detect light emission of the light-sensitive compound in the mark after the mark has been irradiated and adapted to provide data representative of the detected light emission of the light-sensitive compound in the mark. The device further includes a processor cooperating with the detector, that compares the data to a standard and renders an authentication signal based on the comparison. A display displays the data and the authentication signal. Liang, on the other hand, discloses displaying only an authentication result and does not disclose displaying both an authentication signal and data representative d the detected light emission of the light-sensitive compound in the mark. Therefore, new claim 125 patentably distinguishes Liang. Claims 126-148 depend directly or indirectly from claim 125 and are patentable for at least the same reason.

CONCLUSION

In view of the foregoing amendments and remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the Applicants' attorney at the telephone number listed below.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Respectfully submitted,

McInerney et al., Applicants

Neil P. Ferraro, Reg. No. 39,188
WOLF, GREENFIELD & SACKS, P.C.
600 Atlantic Avenue
Boston, MA 02210
(617) 720-3500

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MARKED-UP CLAIMS

2. (Amended) [A detection]An authentication device for [detecting]authenticating a mark on a substrate, the mark being of any desired pattern and including a light-sensitive compound that, when irradiated with light, emits or absorbs light at a first wavelength, the device comprising:

a video mode comprising:

a video mode detector for detecting an image of at least a portion of the substrate known to include the mark; and

a video display for [viewing]displaying the image; and

a snapshot mode comprising:

a light for irradiating the substrate;

a snapshot mode detector for detecting light emission or absorption of the light-sensitive compound in the mark after the mark has been irradiated, the snapshot mode detector providing data representative of the detected light emission or absorption of the light-sensitive compound in the mark;[and]

a processor cooperating with at least the snapshot mode detector, the processor processing the data independent of the pattern of the mark, the processor comparing the data that is independent of the pattern of the mark to a standard and rendering an authentication signal based on the comparison; and

a snapshot display for displaying the data [representative of the detected emission or absorption of the light-sensitive compound in the mark, thereby capturing the mark on the image of the portion of the substrate]and the authentication signal.

18. (Amended) The device of claim 12 further comprising a filter [operably coupled to the light] disposed within a light path of the light source to allow light of at least one predetermined wavelength to irradiate the mark.

22. (Amended) The device of claim 12 wherein a predetermined color representing the mark is displayed on the snapshot display.